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# **Notice of Allowability**

**Application No.**

10/657,963

**Examiner**

Deborah Malamud

**Applicant(s)**

KROLL ET AL.

**Art Unit**

3766

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendments received 20 November 2006.
2. ☒ The allowed claim(s) is/are 1-19.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## **Attachment(s)**

- |  |  |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                      |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|  | 9. <input type="checkbox"/> Other _____.   |

**DETAILED ACTION**

1. The examiner acknowledges the amendments received 20 November 2006.

Claims 20-21 are cancelled; claims 1-19 are pending.

***Claim Objections***

2. In view of the cancellation of claims 20-21, the examiner withdraws the objection to claim 21.

***Claim Rejections - 35 USC § 102***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Applicant's arguments, see "Remarks," page 8, filed 20 November 2006, with respect to claims 15-16 and 18-21 have been fully considered and are persuasive. The rejection of claims 15-16 under 35 USC 102(e) has been withdrawn.

***Claim Rejections - 35 USC § 103***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. Applicant's arguments, see "Remarks," page 7, filed 20 November 2006, with respect to claims 1-12 and 17 have been fully considered and are persuasive. The rejection of claims 1-12 and 17 has been withdrawn.

***Allowable Subject Matter***

7. Claims 1-19 are allowed.

8. The following is an examiner's statement of reasons for allowance: independent claim 1 is a method comprising overdrive pacing the heart by delivering overdrive pacing pulses using a preventive overdrive pacing unit; detecting loss of capture of pacing pulses during preventive overdrive pacing using a capture detection unit; detecting tachycardia occurring subsequent to a loss of capture using a tachycardia detection unit; determining, for each tachycardia occurring following a loss of capture, whether the tachycardia spontaneously terminates; and selectively enabling automatic switching from preventive overdrive pacing to ATP therapy based on a percentage of spontaneously terminating episodes of tachycardia occurring subsequent to loss capture during preventive overdrive pacing. Independent claim 15 is a system comprising an overdrive pacing unit operative to deliver overdrive pacing pulses to the heart for preventing a tachycardia, the overdrive pacing pulses delivered to the heart if no intrinsic depolarization is detected during an overdrive pacing escape interval; an antitachycardia pacing (ATP) therapy unit operative to deliver antitachycardia pacing therapy to the heart; and a capture-based tachycardia detection unit operative to detect a tachycardia based upon loss of capture of overdrive pacing pulses; and a control unit operative to control the overdrive pacing unit and the ATP unit and to selectively enable automatic switching from preventive overdrive pacing to ATP therapy based on a percentage of spontaneously terminating episodes of tachycardia occurring subsequent to loss capture during an initial period of preventive overdrive pacing.

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9. It is known in the art to provide a system for and method of providing overdrive pacing and ATP to a heart, detecting loss of capture of pacing pulses and selecting a therapy regiment based on the diagnosis made as a result of a loss of capture. It is however neither taught nor obvious to one of ordinary skill in the art at the time of the invention to automatically switch from overdrive pacing to ATP based on a percentage of spontaneously terminating episodes of tachycardia occurring subsequent to loss of capture during preventive overdrive pacing.

10. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah Malamud whose telephone number is (571) 272-2106. The examiner can normally be reached on Monday-Friday, 9.00am-5.30pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pezzuto can be reached on (571)272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Robert E Pezzuto  
Supervisory Patent Examiner  
Art Unit 3766



Deborah L. Malamud  
Patent Examiner  
Art Unit 3766